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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R6–ES-2016-0013; FXES11130900000C6–189–FF09E42000]

RIN 1018–BB41

**Endangered and Threatened Wildlife and Plants; Removing Deseret Milkvetch
(*Astragalus desereticus*) from the Federal List of Endangered and Threatened Plants**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule; document availability.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), are removing Deseret milkvetch (*Astragalus desereticus*) from the Federal List of Endangered and Threatened Plants due to recovery. Based on the best available scientific and commercial data, threats to Deseret milkvetch identified at the time of listing are not as significant as originally anticipated and are being adequately managed, the species' population is much greater than was known at the time of listing, and threats to this species have been sufficiently minimized such that it no longer meets the definition of an endangered species or threatened species under the Endangered Species Act of 1973, as amended (Act).

DATES: This final rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: Comments, materials received and supporting documentation used in the preparation of this final rule are available on the Internet at <http://www.regulations.gov>

under Docket No. FWS–R6–ES–2016–0013. Additionally, comments, materials received, and supporting documentation are available for public inspection by appointment at our Utah Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**, below). The post-delisting monitoring plan for Deseret milkvetch is available on our Endangered Species Program’s national website (<http://endangered.fws.gov>) and the Internet at <http://www.regulations.gov> under Docket No. FWS–R6–ES–2016–0013.

FOR FURTHER INFORMATION CONTACT: Larry Crist, Field Supervisor, telephone: 801–975–3330. Direct all questions or requests for additional information to: DESERET MILKVETCH QUESTIONS, U.S. Fish and Wildlife Service; Utah Ecological Services Field Office; 2369 Orton Circle, Suite 50; West Valley City, UT 84119. If you use a telecommunications device for the deaf (TDD), you may call the Federal Relay Service at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Previous Federal Actions

On October 2, 2017, we published a proposed rule to remove Deseret milkvetch from the List of Endangered and Threatened Plants (i.e., to “delist” the species) (82 FR 45779). Please refer to that proposed rule for a detailed description of the Federal actions concerning this species that occurred prior to October 2, 2017.

Species Description and Habitat Information

Deseret milkvetch was first collected in 1893, again in 1909, then not located again until 1981 (Barnaby 1989, p. 126; Franklin 1990, p. 2). The gap in collections may be due to confusion regarding initial records, which were wrongly attributed to Sanpete

County, Utah (Franklin 1990, p. 2). The 1964 description and classification of Deseret milkvetch by Barneby is the accepted taxonomic status (Barneby 1989, p. 126; ITIS 2015).

Deseret milkvetch is a perennial, herbaceous plant in the legume family with silvery-gray pubescent leaves that are 2 to 5 inches (4 to 12 centimeters) long and flower petals that are white to pinkish with lilac-colored tips (Barneby 1989, p. 126). The flower structure indicates an adaptation to pollination primarily by large bees, likely bumblebees (*Bombus* spp.), which are generalist pollinators (Stone 1992, p. 4). The species appears to be tolerant of drought (Stone 1992, p. 3). A more detailed description of the biology and life history of Deseret milkvetch can be found in our 5-year review of the species (U.S. Fish and Wildlife Service 2011, pp. 5–7).

Deseret milkvetch is endemic to Utah County in central Utah, with the only known population near the town of Birdseye (Stone 1992, p. 2). It occurs exclusively on sandy-gravelly soils weathered from the Moroni geological formation, which are limited to an area of approximately 100 square miles (mi²) (259 square kilometers (km²)) (Franklin 1990, p. 4; Stone 1992, p. 3). The species is known to occur at elevations of 5,400 to 5,700 feet (ft) (1,646 to 1,737 meters (m)) (Stone 1992, p. 2; Anderson 2016, pers. comm.; Fitts 2016, pers. comm.). Based upon the species' narrow habitat requirements, it has likely always been rare, with little unoccupied suitable habitat (Franklin 1990, p. 6; Stone 1992, p. 6).

Deseret milkvetch is found on steep south- and west-facing slopes with scattered Colorado pinyon pine (*Pinus edulis*) and Utah juniper (*Juniperus osteosperma*) (Franklin 1990, p. 2). It also grows on west-facing road-cuts where plants are typically larger than

those found in undisturbed habitat (Franklin 1990, p. 2). The species' habitat is sparsely vegetated (SWCA Environmental Consultants 2015, p. 7). The species is an associate of the pinyon-juniper plant community. It is not shade-tolerant but is found in open areas between trees (Goodrich *et al.* 1999, p. 265).

Deseret milkvetch is probably a relatively new species on the scale of geologic time. The species' genus has the ability to colonize disturbed or unstable habitats in dry climates. This ability has likely hastened the evolution of the genus and given rise to many species of *Astragalus* that are sharply differentiated and individually geographically restricted (Stone 1992, p. 6). Deseret milkvetch tolerates at least some degree of disturbance, such as that caused by road maintenance activities (Franklin 1990, p. 2; Fitts and Fitts 2009, p. 5).

Species Abundance, Distribution, and Trends

In 1990, surveys for Deseret milkvetch estimated fewer than 5,000 plants in a single population (Franklin 1990, p. 3). A subsequent survey at the same site in 1992 estimated more than 10,000 plants, indicating that a large seed bank likely exists (Stone 1992, p. 7). Consequently, at the time of listing, we estimated a total population of 5,000 to 10,000 plants (64 FR 56590, October 20, 1999).

In 2008, the Utah Natural Heritage Program surveyed suitable habitats and provided a total population estimate for the species (Fitts 2008, p. 1). The surveyors found new plant sites (hereafter referred to as a colony) to the north and west of the previously known population. The total population estimate was 152,229 plants—including seedlings, juveniles, and adults (Fitts and Fitts 2009, p. 4), well above the number of plants known to occur in 1990. If only adults were counted in the 2008

survey, the population estimate was 86,775 to 98,818 plants (U.S. Fish and Wildlife Service 2011, p. 10). The species remains known from a single population, with multiple colonies.

In 2009, surveys were expanded, and the updated total population estimate was 197,277 to 211,915 juvenile and adult plants (Fitts and Fitts 2010, p. 6); however, the survey methodology in this year was not clearly described. More plants likely occurred on nearby private land with exposed Moroni Formation outcrops, but the landowner did not give permission to survey (Fitts and Fitts 2010, p. 7). These surveys may have overestimated the species' population using the partial census method due to extrapolation from earlier hand-drawn colony boundaries; the small number of transects; and the inclusion of seedlings, which have a high rate of mortality (U.S. Fish and Wildlife Service 2011, p. 10).

In 2016, partial surveys were conducted showing dense levels of occupancy in the northmost portion of the range, in areas that were known to be occupied but had not been previously surveyed (Fitts 2018, pers. comm.). In 2017, surveys of all accessible habitats were conducted in accordance with the protocol used in 2008, resulting in a population estimate of 88,427 (adults and juveniles) in the population total, with 50,483 on State lands (UNHP 2018, p. 4–5). Surveys in 2017 did not include private lands, and so we estimated the total population by applying known densities of adjacent State lands to the private land acreages (UNHP 2018, entire).

The 2017 population estimates represent a reduction in population from the surveys conducted in 2008 and 2009 but are still well above the number of plants known in 1990. We believe the reduction in numbers from 2009 to 2017 is consistent with what

we know about the species' response to drought conditions. In 2015 and 2016, the habitat experienced moderate to severe drought conditions (National Drought Resilience Partnership 2018, entire). In late 2016 and early 2017, the habitat received above-average precipitation levels, and the lower overall population coupled with the increased proportion of juvenile plants recorded in spring of 2017 would be consistent with a response to two seasons of drought followed by increased precipitation in the preceding fall causing a germination event. The proportion of juvenile plants increased from 15 percent in 2008 to 44 percent in 2017 (USFWS 2011, p. 10; UNHP 2018, p. 4). We believe this represents a natural response cycle to annual precipitation patterns and not a declining trend caused by anthropogenic stressors. Additionally, the consistent presence of seedlings and juveniles in the 2008, 2009, 2016, and 2017 surveys indicates that recruitment occurs regularly and a robust seedbank exists. Although 2018 survey results are not yet available, we expect they will be reflective of the low precipitation level in 2018.

At the time of listing, we estimated the occupied habitat of Deseret milkvetch to include approximately 300 acres (ac) (122 hectares (ha)) in an area 1.6 miles (mi) (2.6 kilometers (km)) by 0.3 mi (0.5 km) (64 FR 56590; October 20, 1999). The most recent occupied habitat estimate is approximately 345 ac (140 ha) in an area 2.8 mi (4.5 km) by 0.3 mi (0.5 km) (Fitts and Fitts 2010, p. 6; SWCA Environmental Consultants 2015, p. 2). The species remains known from one population (Birdseye) of scattered colonies on the Moroni formation soils near Birdseye, Utah (U.S. Fish and Wildlife Service 2011, p. 8).

In summary, periodic surveys of Deseret milkvetch were completed from 1990 through 2017. The available information indicates a substantial population increase since

1990 when the first surveys were conducted (from an estimated 5,000–10,000 plants in 1999 to an estimated 88,000 plants in 2017). Population and demographic fluctuations between 2008 and 2017 are likely a natural part of this species' lifecycle that is related to precipitation. While the exact distribution of colonies has shifted over time, there has been no overall reduction in the area occupied since the time of listing and additional colonies have been located (UNHP 2018, p. 3). Therefore, we conclude that the population has been stable to increasing overall since the time of listing.

Land Ownership

An estimated 230 ac (93 ha; 67 percent) of the 345 ac (140 ha) of total occupied habitat for Deseret milkvetch are in the Birdseye Unit of the Northwest Manti Wildlife Management Area (WMA) owned by the Utah Division of Wildlife Resources (UDWR). Of the remaining habitat, 25 ac (10 ha; 7 percent) are owned by the Utah Department of Transportation (UDOT) and 90 ac (36 ha; 26 percent) are privately owned (UDWR *et al.* 2006, p. 4). The Utah School and Institutional Trust Lands Administration (SITLA) owns most of the mineral rights in the species' habitat (UDWR *et al.* 2006, p. 7). No populations of Deseret milkvetch are known to occur on Federal lands (Franklin 1990, pp. 3–4; Anderson 2016, pers. comm.).

Conservation Efforts

A recovery plan for Deseret milkvetch was not prepared; therefore, specific delisting criteria were not developed for the species. However, in 2005, we invited agencies with management or ownership authorities within the species' habitat to serve on a team to develop an interagency conservation agreement for Deseret milkvetch intended to facilitate a coordinated conservation effort between the agencies (UDWR *et*

al. 2006, entire). The Conservation Agreement for *Astragalus desereticus* (Deseret milkvetch) (Conservation Agreement) was signed and approved by UDWR, UDOT, SITLA, and the Service in 2006, with a duration of 30 years. The Conservation Agreement provides guidance to stakeholders to address threats and establish goals to ensure the long-term survival of the species (UDWR *et al.* 2006, p. 7). Conservation actions identified in the Conservation Agreement (in italics), their current status, and efforts to accomplish these actions are described below.

- *Maintain species' habitat within the WMA in its natural state, restricting habitat disturbance:* This action is successful and ongoing. UDWR acquired the Birdseye Unit of the Northwest Manti WMA in 1967. Prior to this acquisition, livestock grazing occurred for more than 50 years on the property (UDWR *et al.* 2006, p. 6). Since the acquisition, livestock grazing has been used only on a limited basis as a management tool by UDWR. However, habitat occupied by Deseret milkvetch is not suitable for grazing, and impacts to the species from grazing have been negligible (UDWR *et al.* 2006, p. 7). This habitat has not been grazed by livestock since 2002 (U.S. Fish and Wildlife 2011, p. 17). Future grazing within the occupied habitat is unlikely due to the steep terrain (Howard 2016, pers. comm.).

A draft wildlife management plan completed by UDWR proposes closing some unauthorized, unpaved roads within the WMA, which likely would further benefit the species by reducing habitat fragmentation and reducing future human access to the population (Howard 2018, pers. comm.). We anticipate that the plan will be finalized within the next year (Howard 2018, pers. comm.). Because this plan is currently only in draft, we do not rely on it in this final rule to delist the species. However, it provides an

indication of future management intentions of UDWR to the continuing benefit of the species from the ongoing management of the WMA.

Removal of juniper in the WMA to improve habitat may occur, but areas occupied by Deseret milkvetch will be avoided to prevent plant damage and mortality associated with this type of surface-disturbing activity (Howard 2018, pers. comm.). The steep terrain associated with Deseret milkvetch makes grazing, juniper removal, and livestock grazing in the species' occupied habitat unlikely.

- *Retain species' habitat within the WMA under the management of UDWR:*

This action is successful and ongoing. The UDWR continues to manage the species' habitat within the WMA in its natural state with minimal disturbance, as stipulated in the Conservation Agreement (Howard 2016, pers. comm.).

- *Evaluate the feasibility of acquiring conservation easements or fee title purchases on small private land parcels between U.S. Highway 89 and the existing WMA as resources, and willing sellers become available:* No easements or property have been acquired, and we do not rely on this conservation action in this final rule to delist the species. However, UDWR has a Statewide initiative to acquire additional lands, so that future acquisition may be possible (Howard 2016, pers. comm.).

- *Avoid using herbicides in the species' habitat managed by UDOT:* This action is successful and ongoing. The UDOT does not use herbicides in Deseret milkvetch habitat within highway rights-of-way, and has committed to continuing this action as stipulated in the Conservation Agreement (Kisen 2016, pers. comm.).

- *Avoid disturbing plants during highway maintenance and construction carried out by UDOT:* This action is successful and ongoing. The UDOT has not disturbed the

species during highway maintenance and construction, and no highway widening projects are anticipated through at least 2040, which is as far as their planning extends (Kisen 2016, pers. comm.).

- *Monitor populations on an annual basis as needed:* This action is successful and ongoing. Surveys were conducted in May of 2016, 2017, and 2018 by Utah Natural Heritage Program personnel.

- *Continue discussions between the UDWR and Service on the development and review of management plans and habitat restoration that may affect species' habitat on the WMA:* This action is successful and ongoing. The Service's Utah Ecological Services Field Office is actively engaged with UDWR in the development and review of actions that may affect the species. The UDWR and Service meet periodically to implement protections identified in the Conservation Agreement.

In summary, most of the conservation actions described in the Conservation Agreement have been successfully implemented and are part of an ongoing management strategy for conserving Deseret milkvetch. Potential threats from residential development, livestock grazing, and highway maintenance and widening are addressed by conservation actions on the approximately 74 percent of the species' occupied habitat that is owned and managed by either UDWR or UDOT. The Conservation Agreement will continue to be implemented through at least 2036.

As described above, we have new information on Deseret milkvetch since our listing decision, and the species' status has improved. This improvement is likely due to expanded surveys, as well as the amelioration of threats and an improved understanding of the stressors affecting the species (see **Summary of Factors Affecting the Species**,

below). In addition to the conservation actions identified in the Conservation Agreement, new opportunities for conservation of the species may be implemented in the future. For example, a new power line proposed near the species' habitat will use the same corridor as an existing transmission line (see Factor A discussion, below). However, this future action is not a factor in our delisting determination.

Survey results from 2017 (the most recent population estimates available) estimated that the total population was 88,427 juvenile and adult plants occurring on approximately 345 ac (140 ha) of habitat, which is a significant increase when compared to estimates of 5,000 to 10,000 plants occurring on approximately 300 ac (122 ha) at the time of listing. The majority of Deseret milkvetch occupied habitat (74 percent) is managed by UDWR and UDOT, and we have no information that indicates the species faces significant threats on private lands. All of the conservation actions for UDWR- and UDOT-managed habitat have been successfully implemented, with the exception of acquiring conservation easements. These measures have been effective in preventing impacts to the species and its habitat on State-managed lands. Additionally, as described below, threats identified at the time of listing in 1999 are not as significant as originally anticipated (U.S. Fish and Wildlife Service 2011, p. 21).

Summary of Changes from the Proposed Rule

We have made updates to our discussions of the species' population status (including 2017 information) and factors affecting the species, based on comments submitted by the public and information provided by peer reviewers. In addition, we now refer to the species primarily by its common name, rather than its scientific name, throughout this rule.

Summary of Factors Affecting the Species

Section 4 of the Act (16 U.S.C. 1531 *et seq.*) and its implementing regulations (50 CFR part 424) set forth the procedures for listing species, reclassifying species, or removing species from listed status. “Species” is defined by the Act as including any species or subspecies of fish or wildlife or plants, and any distinct vertebrate population segment of fish or wildlife that interbreeds when mature (16 U.S.C. 1532(16)). A species is an “endangered species” for purposes of the Act if it is in danger of extinction throughout all or a significant portion of its range and is a “threatened species” if it is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. We consider “foreseeable future” as that period of time within which a reliable prediction can be reasonably relied upon in making a determination about the future conservation status of a species, as described in the Solicitor’s opinion dated January 16, 2009 (M-37021).

A species may be determined to be an endangered or threatened species because of one or more of the five factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We must consider these same five factors in delisting a species.

For species that are already listed as endangered or threatened and being considered for delisting, the five-factor analysis is an evaluation of the threats currently facing the species and the threats that are reasonably likely to affect the species in the

foreseeable future following the removal of the Act's protections. We may delist a species according to 50 CFR 424.11(d) if the best available scientific and commercial data indicate that the species is neither endangered nor threatened for the following reasons: (1) The species is extinct; (2) the species has recovered and is no longer endangered or threatened; and/or (3) the original scientific data used at the time the species was classified were in error. A recovered species has had threats removed or reduced to the point that it no longer meets the Act's definitions of endangered or threatened.

Deseret milkvetch is listed as a threatened species. For the purposes of this analysis, we will evaluate whether or not the currently listed species, Deseret milkvetch, should continue to be listed as a threatened species, based on the best scientific and commercial information available.

We consider 20 years to be a reasonably foreseeable future within which reliable predictions can be made for Deseret milkvetch. This time period includes multiple generations of the species, coincides with the duration of the Conservation Agreement, and falls within the planning period used by UDOT. We consider 20 years a conservative timeframe in view of the much longer-term protections in place for 67 percent of the species' occupied habitat that occurs within the UDWR WMA.

In considering what factors might constitute threats, we must look beyond the exposure of the species to a particular factor to evaluate whether the species may respond to the factor in a way that causes actual impacts to the species. If there is exposure to a factor and the species responds negatively, the factor may be a threat, and during the five-factor threats analysis, we will attempt to determine the significance of the threat. The

threat is significant if it drives or contributes to the risk of extinction of the species such that the species warrants listing as endangered or threatened as those terms are defined by the Act. However, the identification of factors that could affect a species negatively may not be sufficient to justify a finding that the species warrants listing or should remain listed. The information must include evidence sufficient to suggest that the potential threat is likely to materialize and that it has the capacity (sufficient magnitude and extent) to affect the species' status such that it meets the definition of endangered or threatened under the Act. This determination does not necessarily require empirical proof of a threat. The combination of exposure and some corroborating evidence of how the species is likely impacted could suffice. The following analysis examines the factors currently affecting Deseret milkvetch, or that are likely to affect it within the foreseeable future.

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range.

Deseret milkvetch is found in three different land use zones, as categorized by Utah County Land Use Ordinance (Jorgensen 2016b, pers. comm.; Utah County 2016, chapter 5). Approximately 74.6 percent of the species' habitat occurs in Critical Environment Zone 1, which has the primary purpose of supporting water resources for culinary use, irrigation, recreation, natural vegetation, and wildlife. Approximately 16.7 percent occurs in Residential Agricultural Zone 5, which has the primary purpose of preserving agricultural lands. The remaining 8.6 percent occurs in Critical Environment Zone 2, which has the primary purpose of preserving fragile environmental uses (Jorgensen 2016b, pers. comm.). These zones do not strictly regulate management or land use and, therefore, are not discussed under Factor D, below; however, the Utah

County Land Use Ordinance prioritizes uses and provides management guidance for all lands in Utah County, unless specifically exempted (Utah County 2016, chapter 5). All of the conservation actions in place for the species meet the guidelines under their respective land use zone, and we are not aware of any occupied habitat specifically exempted from the guidance described for the aforementioned land use zones.

The following potential stressors were identified for this species at the time of listing: (1) Residential development, (2) highway maintenance and widening, and (3) livestock grazing and trampling. For this final rule, we also considered: (4) Mineral development, (5) transmission lines, and (6) climate change. Each of these stressors is assessed below.

Residential Development

In our October 20, 1999, final listing rule (64 FR 56590), substantial human population growth and urban expansion were predicted in the Provo, Spanish Fork, and Weber River drainages east of the Wasatch Mountains. In that rule, increased residential development was considered a threat to the species due to the potential for loss of plants and habitat that results from the construction of roads, buildings, and associated infrastructure (e.g., utilities). However, counter to the predictions of the Quality Growth Efficiency Tools Technical Committee cited in that final listing rule, residential development in these areas has been very limited. The nearest community, Birdseye, is unincorporated and has not been included in recent U.S. Census Bureau surveys; therefore, no recent population estimates are available. We are aware of only one house, and a barn that was recently built adjacent to Deseret milkvetch occupied habitat (Fitts 2016, pers. comm.). We are aware of only three proposed development properties in this

area. One property has the potential for 95 lots and is 2.8 mi (4.5 km) from the known occupied habitat of Deseret milkvetch. The other two developments would be single dwelling properties approximately four mi (6 km) and five mi (8 km) from known occupied habitat (Larsen 2016, pers. comm.; Jorgensen 2016a, pers. comm.). These three proposed developments are located near Thistle Creek, upstream from Deseret milkvetch habitat (Jorgensen 2016a, pers. comm.). However, the species' habitat occurs on steep upland slopes that are not vulnerable to potential habitat impacts from upstream areas. Residential development at this scale and distance from Deseret milkvetch population is not likely to impact the species or its habitat now or within the foreseeable future.

The majority of Deseret milkvetch habitat occurs on steep, rocky, erosive slopes that are not favorable for development; consequently, we do not anticipate any future residential development in the species' occupied habitat (Fitts 2016, pers. comm.). Additionally, as previously described, approximately 230 ac (93 ha)—67 percent of total habitat for the species—are in a WMA owned by the UDWR that is protected from residential development, as discussed under Factor D, below.

We conclude, based on the available information, that residential development is not a threat to Deseret milkvetch due to: (1) The minimal disturbance from residential development that has occurred on the species' habitat to date and the minimal amount of disturbance anticipated in the future; (2) the steep, rocky, erosive nature of the species' habitat, which precludes most development; and (3) the amount of habitat (67 percent) that is protected from residential development.

Highway Widening and Maintenance

In our October 20, 1999, final listing rule (64 FR 56590), potential widening of Highway 89 was considered a threat to plants growing in the highway right-of-way. Highway 89 widening would likely result in the loss of Deseret milkvetch plants and habitat that are directly adjacent to Highway 89. Regular highway maintenance activities include herbicide use to control weeds and could also result in the loss of plants and habitat within the right-of-way. The species appears to tolerate some levels of disturbance related to road maintenance because it recolonizes areas that have been disturbed by tracked vehicles, road grading equipment, and road cuts (Franklin 1990, p. 2; Fitts and Fitts 2009, p. 5; SWCA 2015, p. 7).

Widening of Highway 89 has not occurred and is not anticipated by UDOT through at least 2040, which is as far as planning extends (Kisen 2016, pers. comm.). The nearest highway development project is a modification of the intersection of Highway 89 and Highway 6 (Kisen 2016, pers. comm.). This project is approximately seven mi (11 km) north of Birdseye and four mi (6 km) north of the nearest occurrence of the species. Therefore, we do not anticipate any direct or indirect impacts to the species. No other highway projects are currently planned within 20 mi (32 km) of Birdseye (Kisen 2016, pers. comm.).

Road maintenance on Highway 89 is ongoing. However, as committed to in the Conservation Agreement, UDOT avoids herbicide use and other disturbance in the species' habitat (Lewinsohn 2016, pers. comm.; UDWR *et al.* 2006, p. 9). In instances where herbicides must be used, UDOT will not apply it by an aerial application within 500 ft (152.5 m) of occupied habitat and will maintain a 100-ft (30-m) buffer for hand application around individual plants (UDWR *et al.* 2006, p. 9).

In summary, highway widening is not anticipated within the vicinity of occupied Deseret milkvetch habitat. We are not aware of planned road-widening construction projects in or near the species' habitat, and UDOT has committed to avoiding herbicide use and other disturbance in occupied Deseret milkvetch habitat during maintenance activities (Lewinsohn 2016, pers. comm.; UDWR *et al.* 2006, p. 9). Therefore, based on the available information, we conclude that highway widening and maintenance are not a threat to Deseret milkvetch.

Livestock Grazing and Trampling

In our October 20, 1999, final listing rule (64 FR 56590), livestock grazing and trampling were considered threats to the species because of direct consumption of plants, trampling of plants and the burrows of ground-dwelling pollinators, and increased soil erosion. In contrast to many species of *Astragalus*, this species apparently is not toxic to livestock, and is palatable and may be consumed (Stone 1992, p. 6; Tilley *et al.* 2010, p. 1).

Prior to UDWR acquiring the Northwest Manti WMA in 1967, livestock grazing occurred for more than 50 years on habitat occupied by Deseret milkvetch and may help to explain why attempts to locate the species were unsuccessful for decades (UDWR *et al.* 2006, p. 6). Once UDWR acquired the land, they chained (removed scrub growth) and seeded level land upslope of the species' habitat to improve grazing for wild ungulates and livestock. The last cattle grazing on the Wildlife Management Unit occurred in 2002 (U.S. Fish and Wildlife 2011, p. 17).

The UDWR does not currently allow livestock grazing on the Birdseye Unit of the WMA and does not plan for any future grazing within the portion of the WMA that

contains Deseret milkvetch habitat (Howard 2018, pers. comm.). Avoidance of livestock grazing in the species' habitat that is managed by UDWR is stipulated in the Conservation Agreement (UDWR *et al.* 2006, p. 8). Additionally, the species' habitat is not well-suited to grazing due to sparse forage and steep slopes. Some private lands where the species occurs allow livestock grazing; however, when last visited, there was no evidence of impacts to the species (U.S. Fish and Wildlife 2011, p. 17).

In summary, livestock grazing and trampling were considered a threat to Deseret milkvetch in our October 20, 1999, final listing rule (64 FR 56590) because grazing occurred historically over much of the species' habitat and we were concerned about trampling and erosion impacts. However, livestock grazing no longer occurs on the UDWR WMA, representing 67 percent of the species' habitat. Additionally, occupied Deseret milkvetch habitat on both private and protected lands is steep and rocky, with sparse forage for cattle. Consequently, minimal grazing impacts have been documented. We conclude, based on the available information, that livestock grazing and trampling are not a threat to Deseret milkvetch.

Mineral Development

Impacts from mineral development were not considered in our October 20, 1999, final listing rule (64 FR 56590). At the time the Conservation Agreement was signed, there was no information indicating that mineral development was going to occur in or near occupied Deseret milkvetch habitat (UDWR *et al.* 2006, p. 7). SITLA owns the mineral rights on most of the land occupied by the species, and the agency has not had any inquiries regarding mineral development in the species' habitat since the Conservation Agreement was signed (UDWR *et al.* 2006, p. 7; Wallace 2017, pers.

comm.). In the Conservation Agreement, which will remain in effect through 2036, SITLA agreed to alert any energy and mineral developers to the presence of occupied habitat and recommend surface use stipulations that avoid disturbance and provide mitigation for unavoidable effects to plants or their habitat (UDWR *et al.* 2006, p. 8).

In summary, mineral development was not considered a threat when Deseret milkvetch was listed under the Act. According to the compliance office of SITLA, there have been no inquiries regarding mineral development in this area. It is a severed estate, therefore, SITLA does not own the mineral rights, but would manage surface disturbance associated with mineral development and the area is flagged in their business system as being under a conservation agreement (Wallace 2017, pers. comm.). Therefore, based on the available information, we conclude that mineral development is not a threat to Deseret milkvetch.

Transmission Lines

Impacts from transmission lines were not considered in our October 20, 1999, final listing rule (64 FR 56590). The Mona to Bonanza high-voltage transmission line is an existing power line near Deseret milkvetch habitat located at the easternmost extent of the known range of the species (Miller 2016, pers. comm.). The TransWest Express transmission line is a planned power line that would use the same corridor as the existing Mona to Bonanza transmission line (SWCA Environmental Consultants 2015, p. 1). TransWest Express developers estimated that approximately 10.9 ac (4.4 ha) of potential or occupied habitat for the species occurs within 300 ft (91 m) of proposed transmission structures, and approximately 0.25 ac (0.10 ha) would be directly disturbed (SWCA Environmental Consultants 2015, p. 17). However, minimal impacts are expected to

result from the transmission line installation because dust abatement measures would be implemented, the proposed route is located farther away from Deseret milkvetch populations than the existing Mona to Bonanza transmission line, and existing access roads would be used within the species' habitat (U.S. Fish and Wildlife Service 2016, pp. 25–31). Consequently, impacts from the proposed TransWest Express transmission line are not anticipated to result in a population-level effect to the species based upon the localized extent of impacts and the currently robust status of the species (see **Species Abundance, Distribution, and Trends**, above). In addition, because the species can tolerate some levels of disturbance and plants have recolonized disturbed areas, any remaining development-related impacts should be minimal (Fitts and Fitts 2009, p. 5; Franklin 1990, p. 2).

In summary, Deseret milkvetch maintains a large, robust population next to the existing Mona to Bonanza transmission line, and only a very minimal amount of habitat (less than 0.25 ac (0.10 ha)) would be disturbed by the proposed future construction of the TransWest transmission line. We conclude, based on the available information, that transmission lines are not a threat to Deseret milkvetch.

Effects of Climate Change

Impacts from climate change were not considered in our October 20, 1999, final listing rule (64 FR 56590). Our current analyses for species classification under the Act include consideration of ongoing and projected changes in climate. The terms “climate” and “climate change” are defined by the Intergovernmental Panel on Climate Change (IPCC). “Climate” refers to the mean and variability of different types of weather conditions over time, with 30 years being a typical period for such measurements,

although shorter or longer periods also may be used (IPCC 2007, p. 78). The term “climate change” thus refers to a change in the mean or variability of one or more measures of climate (e.g., temperature or precipitation) that persists for an extended period, typically decades or longer, whether the change is due to natural variability, human activity, or both (IPCC 2007, p. 78). Various types of changes in climate can have direct or indirect effects on species. These effects may be positive, neutral, or negative, and they may change over time, depending on the species and other relevant considerations, such as the effects of interactions of climate with other variables (e.g., habitat fragmentation) (IPCC 2007, pp. 8–14, 18–19). In our analyses, we use our expert judgment to weigh relevant information, including uncertainty, in our consideration of various aspects of climate change.

Estimates regarding the risk of future persistent droughts in the southwestern United States range from 50 to 90 percent (Ault *et al.* 2013, p. 7545). Climate models that predict future temperatures over three different time periods in the 21st century for the southwestern United States show the greatest warming in summer months (3.5 to 6.5 degrees Fahrenheit (°F)) (1.9 to 3.6 degrees Celsius (°C)), with a localized maximum increase in temperatures in central Utah (Kunkel *et al.* 2013, p. 72). Nationwide, Utah ranks eighth in rate of warming since 1912, with a 0.233 °F (0.129 °C) increase per decade; and seventh in rate of warming since 1970, with a 0.588 °F (0.327 °C) increase per decade (Tebaldi *et al.* 2012, pp. 3, 5).

The *Astragalus* genus has the ability to colonize disturbed or unstable habitats in progressively dry climates and thus appears to be adapted to drought (Stone 1992, p. 6). We do not have a clear understanding of how Desert milkvetch responds to precipitation

changes, although the species has persisted in spite of recent dry conditions. Generally, plant numbers decrease during drought years and recover in subsequent seasons that are less dry. For example, many plants of Deseret milkvetch appeared to die-off in response to the 2012 drought, but have since repopulated the area from the seed bank (Fitts 2016, pers. comm.). Deseret milkvetch and other species in the bean family typically have persistent seed banks with at least some proportion of the seed bank being long-lived because the seeds are physically dormant for long periods of time (Dodge 2009, p. 3; Orscheg and Enright 2011, p. 186; Segura *et al.* 2014, p. 75). Dormant seeds have a seed coat that imposes a physical barrier between water and the embryo, and this type of dormancy provides an ecological advantage by staggering germination over a long period of time, protecting the embryo from microbial attack, and increasing the longevity of seeds within the soil (Fulbright 1987, p. 40). Species with physically dormant seeds typically have seeds germinating over many years, which increases the probability of the species' persistence in an unpredictable environment and has been termed a "bet-hedging strategy" (Simons 2009, pp. 1990–1991; Williams and Elliott 1960, pp. 740–742). This strategy buffers a population against catastrophic losses and negative effects from environmental variation (Tielbörger *et al.* 2014, p. 4). Deseret milkvetch can be dormant and not detectable for some years, but later detected in the same area given favorable precipitation conditions (Fitts 2016, pers. comm.). This pattern provides some evidence the species has a persistent seed bank and possibly other life stages that remain dormant during drought conditions.

Deseret milkvetch appears well-adapted to a dry climate and can quickly colonize after disturbance. Plants growing in high-stress landscapes (e.g., poor soils and variable

moisture) are generally adapted to stress and thus may experience lower mortality during severe droughts (Gitlin *et al.* 2006, pp. 1477, 1484). Furthermore, plants and plant communities of arid and semi-arid systems may be less vulnerable to the effects of climate change if future climate conditions are within the historic natural climatic variation experienced by Deseret milkvetch (Tielbörger *et al.* 2014, p. 7). The species likely has experienced multiple periods of prolonged drought conditions in the past as documented from reconstructed pollen records in sagebrush steppe lands (Mensing *et al.* 2007, pp. 8–10). Natural climatic variation in the Southwest for the last 500 years included periodic major droughts (Kunkle *et al.* 2013, p. 14). Therefore, it is likely that Deseret milkvetch will be able to withstand future periods of prolonged drought.

In summary, climate change is affecting and will continue to affect temperature and precipitation events. We expect that Deseret milkvetch, like other narrow endemics, could experience future climate change-related drought. However, the scope of any effects is mostly speculative at this time because current data are not reliable at the local level. The information we do have indicates the species and the genus are adapted to drought and are able to recolonize disturbed areas. Therefore, based upon available information, we conclude that climate change is not a threat to Deseret milkvetch currently or within the foreseeable future.

Summary of Factor A

The following stressors warranted consideration as possible current or future threats to Deseret milkvetch under Factor A: (1) Residential development, (2) highway maintenance and widening, (3) livestock grazing and trampling, (4) mineral development, (5) transmission lines, and (6) climate change. However, these stressors either have not

occurred to the extent anticipated at the time of listing or are being adequately managed, or the species is tolerant of the stressor as described below.

- Minimal disturbance from residential development has occurred on Deseret milkvetch habitat to date or is anticipated in the future because of the steep, rocky, erosive nature of the species' habitat. In addition, 67 percent of the species' habitat is protected from residential development due to its inclusion in a State WMA.

- UDOT anticipates no highway widening in habitat occupied by Deseret milkvetch, and herbicide use and other disturbances are avoided in habitat for the species.

- The steep, rocky nature of Deseret milkvetch habitat and sparse forage availability minimize livestock grazing, and 67 percent of all of the species' known habitat is carefully managed by UDWR to restrict it from grazing.

- The lack of inquiries and severed estate status of the habitat occupied by Deseret milkvetch indicate that mineral development is not a threat.

- The existing transmission line is not a threat to Deseret milkvetch, and activity associated with the proposed transmission line occurring within the species' occupied habitat will be confined to existing access roads.

- Deseret milkvetch and its genus are likely adapted to drought related to climate change.

- Deseret milkvetch appears able to recolonize disturbed areas readily.

Therefore, based on the available information, we do not consider there to be any threats related to the present or threatened destruction, modification, or curtailment of habitat or range of Deseret milkvetch.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes.

Overutilization for any purpose was not considered a threat in the final rule to list the species (64 FR 56590; October 20, 1999). The only collections of the species that we are aware of were for scientific purposes. An unknown number of seeds were collected in 2007, and approximately 850 seeds were collected from 45 plants in 2008. In addition, 1,016 seeds were collected from 55 plants in 2009, for germination trials and long-term seed storage at Red Butte Gardens and Arboretum in Salt Lake City, Utah, and the National Center for Genetic Resources Preservation in Fort Collins, Colorado (Dodge 2009, p. 4). This amount of collection is insignificant given the current population estimates for the species, and overall it is beneficial because it will improve our understanding of species propagation and ensure genetic preservation. We are not aware of any other utilization of the species. Therefore, based on the available information, we do not consider there to be any threats related to overutilization for commercial, recreational, scientific, or educational purposes of Deseret milkvetch.

C. Disease or Predation.

Disease and predation were not considered threats in the final rule to list the species (64 FR 56590; October 20, 1999). We are not aware of any issues or potential stressors regarding disease or insect predation. As described in more detail above under Factor A, grazing—which could be considered a form of predation—is limited in the species' habitat and does not affect the species throughout its range or at a population level. Therefore, based on the available information, we do not consider there to be any threats related to disease or predation of Deseret milkvetch.

D. The Inadequacy of Existing Regulatory Mechanisms.

Section 4(b)(1)(A) of the Act requires the Service to take into account “those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species.” In relation to Factor D under the Act, we interpret this language to require us to consider relevant Federal, State, and Tribal laws, regulations, and other such mechanisms that may minimize any of the threats we describe in the threats analyses under the other four factors or otherwise enhance conservation of the species. We give the strongest weight to statutes and their implementing regulations and to management direction that stems from those laws and regulations; an example would be State governmental actions enforced under a State statute, constitution, or regulation or Federal action under statute or regulation.

For currently listed species that are being considered for delisting, we consider the adequacy of existing regulatory mechanisms to address threats to the species absent the protections of the Act. We examine whether other regulatory mechanisms would remain in place if the species were delisted, and the extent to which those mechanisms would continue to help ensure that future threats will be reduced or minimized.

In our discussion under Factors A, B, C, and E, we evaluate the significance of threats as mitigated by any conservation efforts and existing regulatory mechanisms. Where threats exist, we analyze the extent to which conservation measures and existing regulatory mechanisms address the specific threats to the species. Regulatory mechanisms, if they exist, may reduce or eliminate the impacts from one or more identified threats.

As previously discussed, conservation measures initiated by UDWR, SITLA, and UDOT under the Conservation Agreement manage potential threats caused by residential

development, highway maintenance and widening, and livestock grazing and trampling, as well as the more recently identified proposed transmission line. In addition to these conservation measures, relevant Utah State statutes and UDWR administrative rules that will remain in effect regardless of Deseret milkvetch's status under the Act include:

1. Title 23—Wildlife Resources Code of Utah, Chapter 21—Lands and Waters for Wildlife Purposes, Section 5—State-owned lands authorized for use as wildlife management areas, fishing waters and other recreational activities. This statute authorizes the creation, operation, maintenance, and management of wildlife management areas including the Birdseye Unit of the Northwest Manti WMA. The Birdseye Unit contains 67 percent of all known habitat occupied by Deseret milkvetch. Consequently, two-thirds of all known habitat is currently managed and will continue to be managed as wildlife habitat regardless of the species' status under the Act.

2. Utah Administrative Code, Rule R657-28—Use of Division Lands. This administrative rule describes the lawful uses and activities on UDWR lands including Birdseye Unit of the Northwest Manti WMA. These uses cannot conflict with the intended land use or be detrimental to wildlife or wildlife habitat. This administrative rule provides further support to beneficial management on the 67 percent of occupied habitat managed by UDWR, regardless of the species' status under the Act.

We are not aware of any habitat occupied by Deseret milkvetch on Federal lands. We anticipate that the conservation measures initiated by UDWR, SITLA, and UDOT under the Conservation Agreement will continue through at least 2036. Consequently, we find that conservation measures along with existing State regulatory mechanisms are adequate to address specific stressors absent protections under the Act.

E. Other Natural or Manmade Factors Affecting Its Continued Existence.

Rarity

In our October 20, 1999, final listing rule (64 FR 56590), small population size was considered a concern for the species because of the potential for low levels of genetic diversity as compared to other more widespread, related species. A species may be considered rare due to: (1) Limited geographic range, (2) occupation of specialized habitats, or (3) small population numbers (Primack 1998, p. 176). This species meets each of these qualifications.

Deseret milkvetch is likely a localized neoendemic, that is, it is a relatively new species on the scale of geologic time and likely has always been geographically restricted (rare) (Stone 1992, p. 6). A species that has always been rare, yet continues to survive, could be well-equipped to continue to exist in the future. Many naturally rare species exhibit traits that allow them to persist for long periods within small geographic areas, despite their small population size. Consequently, the fact that a species is rare does not necessarily indicate that it may be endangered or threatened. Rarity alone, in the absence of other stressors, is not a threat. Despite the species' unique habitat characteristics and limited range, its current population numbers and preliminary demographic analyses show that its known population (via information at monitored sites) is much larger than in 1990, when the first surveys were conducted, and will likely be sustained due to the species' resiliency and the absence of significant stressors. Additionally, as noted under Factor B, above, seeds have been collected for long-term seed storage at Red Butte Gardens and Arboretum in Salt Lake City, Utah, and the National Center for Genetic

Resources Preservation in Fort Collins, Colorado (Dodge 2009, p. 4). This collection provides added security for the species.

Stochastic Events

In our October 20, 1999, final listing rule (64 FR 56590), stochastic events—particularly fire, drought, and disease—were considered a threat because of the species’ small population size and highly restricted range. Because rare species may be vulnerable to single event occurrences, it is important to have information on how likely it is such an event may occur and how it may affect the species. Demographic stochasticity—random events in survival and reproductive success—and genetic stochasticity—from inbreeding and changes in gene frequency—are not significant threats based on limited abundance trends and the known population size of Deseret milkvetch (Stone 1992, pp. 8–10).

Environmental stochasticity—such as fire, drought, and disease—may also be a threat to the species (Stone 1992, p. 10). However, we have concluded that fire is unlikely in the open, a sparsely wooded habitat that the species favors (72 FR 3379, January 25, 2007; U.S. Fish and Wildlife 2011, p. 21). As explained above under “Climate Change” in the Factor A discussion, the species appears to be drought tolerant, showing an ability to rebound the following drought and recolonize disturbed areas in progressively dry climates. Lastly, as noted above in the Factor C discussion, there is no evidence of disease or insect pests affecting Deseret milkvetch. Since listing in 1999, survey data have shown that the species’ known range is somewhat larger and its population numbers are much higher than previously thought, thus indicating tolerance to

stochastic events. These increases are likely due to a combination of expanded surveys and increases in population.

Summary of Factor E

Given the lack of threats within the Deseret milkvetch population and the robust population size, we conclude that rarity and stochastic events are not threats to the species.

Cumulative Effects

Many of the stressors discussed in this analysis could work in concert with each other and result in a cumulative adverse effect to Deseret milkvetch, i.e., one stressor may make the species more vulnerable to other threats. For example, stressors discussed under Factor A that individually do not rise to the level of a threat could together result in habitat loss. Similarly, small population size in combination with stressors discussed under Factor A (residential development, highway maintenance and widening, livestock grazing and trampling, mineral development, transmission lines, and climate change) could present a potential concern.

However, most of the potential stressors we identified either have not occurred to the extent originally anticipated at the time of listing in 1999 or are adequately managed as described in this final rule. Furthermore, those stressors that are evident, such as drought and rarity, appear well-tolerated by the species. In addition, we do not anticipate stressors to increase on UDWR lands that afford protections to the species on 67 percent of occupied habitat for the reasons discussed earlier in this rule. Furthermore, the increases documented in the abundance and distribution of the species since it was listed in 1999 do not support a conclusion that cumulative activities threaten the species.

Summary of Comments and Recommendations

In the proposed rule published in the *Federal Register* on October 2, 2017 (82 FR 45779), we requested that all interested parties submit written comments on the proposal by December 1, 2017. We also contacted appropriate Federal and State agencies, scientific experts and organizations, and other interested parties and invited them to comment on the proposal. We did not receive any requests for a public hearing. All substantive information provided during the comment period has either been incorporated directly into this final determination or is addressed below.

Peer Reviewer Comments

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270) and updated guidance issued on August 22, 2016 (USFWS 2016, entire), we solicited expert opinion from three knowledgeable individuals with scientific expertise that included familiarity with Deseret milkvetch, its habitat, its biological needs and potential threats, or principles of conservation biology. We received responses from all of the peer reviewers.

We reviewed all comments we received from the peer reviewers for substantive issues and new information regarding the proposed delisting of Deseret milkvetch. The peer reviewers provided additional information, clarifications, and suggestions to improve the final rule. We included their information in this final rule. Two peer reviewers were supportive of the delisting action. The third provided only minor technical comments and editorial suggestions on the rule and did not express an opinion regarding the action.

Public Comments

We received 15 letters from the public (as well as one from a peer reviewer) that provided comments on the proposed rule. Of these, six commenters stated their support for the delisting of Deseret milkvetch, and six commenters believed that it does not warrant delisting. We also received three comments that were not directly related to the proposed action in any way and are not addressed below.

Relevant public comments are addressed in the following summary, and new information was incorporated into the final rule as appropriate.

(1) *Comment:* We received four public comments that the species should not be delisted based primarily on its limited range and single population.

Our Response: Rarity or range restriction alone is not a basis for determining that a species meets the definition of “endangered species” or “threatened species.” Our analysis of the best commercial and scientific information available indicates that the population of Deseret milkvetch is secure. We also determined that despite the limited range of this species, stressors either have not occurred to the extent anticipated at the time of listing in 1999 or are being adequately managed, or the species is tolerant of the stressor.

(2) *Comment:* We received one comment that our proposed delisting was premature because survey data results from 2016 were not available at the time of publication of the proposed rule (October 2, 2017). This commenter suggested that we should not base our decision on information that was being excluded from public access.

Our Response: The proposed delisting was based on the best commercial and scientific information available at the time. We did not have access to 2016 survey data at the time and did not base our decision on it or withhold this information from the

public. Partial surveys were conducted in 2016, and full surveys were conducted in 2017. This rule has been updated with relevant information from both years. Survey results are not yet available for 2018.

(3) *Comment:* We received two public comments suggesting that additional surveys should be conducted before the species is delisted, to provide more information on population status and also how stressors are impacting the population.

Our Response: This final rule includes survey information from 2017, which supports our conclusion that the species has maintained occupancy and a robust population. Additionally, the post-delisting monitoring (PDM) plan provides for a minimum of 5 years of annual monitoring after this rule takes effect. The PDM plan also includes criteria to determine whether population trends allow for completion of monitoring, or if additional monitoring or a status review is needed. We believe this will provide adequate confirmation of population stability in the absence of the Act's protections.

(4) *Comment:* We received four public comments supporting the delisting of Deseret milkvetch on the basis that its listing has impeded human use on the land it occupies, specifically in regards to grazing and off-road vehicle use. These comments suggested the species should be delisted so that grazing and off-road vehicle use could increase within the habitat.

Our Response: We may only base our determination of the status of a species on the best available commercial or scientific information. We may not consider the impact to land management or the demand for other uses within the species' habitat when determining whether a species is endangered or threatened, except insofar as to whether

such uses represent stressors that may threaten the species. Additionally, a conservation agreement for this species remains in effect, and we do not anticipate existing regulations regarding motorized vehicle use or grazing in the habitat to change as a result of this delisting. If the human use of the habitat for recreation, grazing, or other purposes increase significantly in the future, a reassessment of this species' status may be initiated.

(5) *Comment:* We received a comment stating that the lack of a recovery plan for the species, combined with the voluntary nature of the existing Conservation Agreement and the fact that only 18 years remain in the current agreement, means that adequate protections are not provided to the species in the absence of the protections of the Act.

Our Response: Recovery plans provide roadmaps to species recovery, but are not required in order to achieve recovery of a species or to evaluate it for delisting. Recovery plans are also nonbinding documents that rely on voluntary participation from landowners, land managers, and other recovery partners. Additionally, we have no information to suggest that UDWR, SITLA, and UDOT will not continue to act in good faith according to the Conservation Agreement as it exists. A listing decision must consider actions taken by States to provide for the conservation of a species. Lack of continued implementation of the Conservation Agreement or large changes in management practices in the species' habitat by the State of Utah may result in reevaluation of the status of Deseret milkvetch.

(6) *Comment:* We received one public comment stating that the projected development rates in Utah County are likely to negatively impact Deseret milkvetch habitat to the degree that would constitute a species-level threat; thus, delisting the species at this time is not appropriate.

Our Response: We agree that residential development in Utah County is increasing and that the patterns of such development are not entirely predictable. However, we have no information to suggest that development within Deseret milkvetch occupied habitat on private lands is imminent. Furthermore, development is prohibited within the Birdseye Wildlife Management Unit, which represents the majority of the known population. For additional detail, see our threats analysis under A. *The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range*.

(7) *Comment:* We received a public comment stating that we should not delist Deseret milkvetch due to our lack of information regarding the species, particularly in the areas of population biology, population viability, genetics, phenology, and response to stressors.

Our Response: We utilized the best scientific and commercial information available for this species in our determination. We conclude that enough information is available for Deseret milkvetch and its stressors to adequately evaluate its status. Should additional research or post-delisting monitoring in the future provide information that indicates our evaluation is in error or, the species' status has declined since delisting, we would reevaluate the status of the species based on this information.

Determination of Species Status

Section 4 of the Act (16 U.S.C. 1533), and its implementing regulations at 50 CFR part 424, set forth the procedures for determining whether a species meets the definition of "endangered species" or "threatened species." The Act defines an endangered species as any species that is "in danger of extinction throughout all or a significant portion of its range" and a threatened species as any species "that is likely to

become an endangered species within the foreseeable future throughout all or a significant portion of its range.” The Act requires that we determine whether a species meets the definition of “endangered species” or “threatened species” because of any of the following factors:

(A) The present or threatened destruction, modification, or curtailment of its habitat or range;

(B) Overutilization for commercial, recreational, scientific, or educational purposes;

(C) Disease or predation;

(D) The inadequacy of existing regulatory mechanisms; or

(E) Other natural or manmade factors affecting its continued existence.

The same factors apply whether we are analyzing the species’ status throughout all of its range or a significant portion of its range.

Determination of Status Throughout All of Deseret Milkvetch’s Range

We conducted a review of the status of Deseret milkvetch and assessed the five factors to evaluate whether Deseret milkvetch is in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range. We also consulted with species experts and land management staff with UDWR and UDOT who are actively managing for the conservation of the species. We carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to the species. We considered all of the stressors identified at the time of listing (1999) as well as newly identified potential stressors such as mineral development, transmission

lines, and climate change. As previously described, the stressors considered in our five-factor analysis fall into one or more of the following categories:

- Stressors including residential development, highway widening, and livestock grazing and trampling have not occurred to the extent anticipated at the time of listing, and existing information indicates that the extent of the impact will not change in the future.

- Stressors including highway maintenance, livestock grazing, transmission lines, and mineral development are adequately managed through the Conservation Agreement.

- The species is tolerant of stressors including climate change, rarity, stochastic events, and cumulative effects, and existing information indicates that this tolerance will not change in the future.

These conclusions are supported by the available information regarding species abundance, distribution, and trends, and are in agreement with information presented in our advance notice of proposed rulemaking (72 FR 3379; January 25, 2007), in our 5-year review (U.S. Fish and Wildlife Service 2011), and in our proposed delisting rule (82 FR 45779; October 2, 2017). Thus, after assessing the best available information, we conclude that Deseret milkvetch is not in danger of extinction throughout all of its range, nor is it likely to become so in the foreseeable future.

Because we determined that Deseret milkvetch is not in danger of extinction or likely to become so in the foreseeable future throughout all of its range, we will consider whether the Deseret milkvetch is in danger of extinction or likely to become so in the foreseeable future within any significant portions of its range.

Determination of Status Throughout a Significant Portion of Deseret Milkvetch's Range

Under the Act and our implementing regulations, a species may warrant listing if it is in danger of extinction or likely to become so in the foreseeable future throughout all or a significant portion of its range. The Act defines “endangered species” as any species which is “in danger of extinction throughout all or a significant portion of its range,” and “threatened species” as any species which is “likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” The term “species” includes “any subspecies of fish or wildlife or plants, and any distinct population segment [DPS] of any species of vertebrate fish or wildlife which interbreeds when mature.” We published a final policy interpreting the phrase “significant portion of its range” (SPR) (79 FR 37578; July 1, 2014). The final policy states that: (1) If a species is found to be in danger of extinction or likely to become so in the foreseeable future throughout a significant portion of its range, the entire species is listed as an endangered species or a threatened species, respectively, and the Act’s protections apply to all individuals of the species wherever found; (2) a portion of the range of a species is “significant” if the species is not currently in danger of extinction or likely to become so in the foreseeable future throughout all of its range, but the portion’s contribution to the viability of the species is so important that, without the members in that portion, the species would be in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range; (3) the range of a species is considered to be the general geographical area within which that species can be found at the time the Service or the National Marine Fisheries Service makes any particular status determination; and (4) if a vertebrate species is in danger of extinction or likely to become so in the foreseeable

future throughout an SPR, and the population in that significant portion is a valid DPS, we will list the DPS rather than the entire taxonomic species or subspecies.

The SPR policy is applied to all status determinations, including analyses for the purposes of making the listing, delisting, and reclassification determinations. However, we acknowledge the recent adverse ruling by the United States District Court for the Northern District of California, which has vacated the “significant portion” part of the Services’ SPR Policy (*Desert Survivors, et al. v. U.S. Department of the Interior, et al.*, No. 16-cv-01165-JCS (Northern District of California, Aug. 24, 2018)). The procedure for analyzing whether any portion is an SPR is similar, regardless of the type of status determination we are making. The first step in our analysis of the status of a species is to determine its status throughout all of its range. If we determine that the species is in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range, we list the species as an endangered (or threatened) species, and no SPR analysis will be required.

When we conduct an SPR analysis, we first identify any portions of the species’ range that warrant further consideration. The range of a species can theoretically be divided into portions in an infinite number of ways. However, there is no purpose in analyzing portions of the range that are not reasonably likely to be significant and either in danger of extinction or likely to become so in the foreseeable future. To identify only those portions that warrant further consideration, we determine whether there is substantial information indicating that (1) the portions may be significant and (2) the species may be in danger of extinction in those portions or likely to become so within the foreseeable future. We emphasize that answering these questions in the affirmative is not

a determination that the species is in danger of extinction or likely to become so in the foreseeable future throughout a significant portion of its range—rather, it is a step in determining whether a more detailed analysis of the issue is required. In practice, a key part of this analysis is whether the threats are geographically concentrated in some way. If the threats to the species are affecting it uniformly throughout its range, no portion is likely to warrant further consideration. Moreover, if any concentration of threats applies only to portions of the range that clearly do not meet the biologically based definition of “significant” (i.e., the loss of that portion clearly would not be expected to increase the vulnerability to extinction of the entire species), those portions will not warrant further consideration.

If we identify any portions that may be both (1) significant and (2) in danger of extinction or likely to become so in the foreseeable future, we engage in a more detailed analysis to determine whether both of these standards are indeed met. The identification of an SPR does not create a presumption, prejudgment, or other determination as to whether the species in that identified SPR is in danger of extinction or likely to become so in the foreseeable future. We must go through a separate analysis to determine whether the species is in danger of extinction or likely to become so in the foreseeable future in the SPR. To determine whether a species is in danger of extinction or likely to become so in the foreseeable future throughout an SPR, we will use the same standards and methodology that we use to determine if a species is in danger of extinction or likely to become so in the foreseeable future throughout its range.

Depending on the biology of the species, its range, and the threats it faces, it may be more efficient to address the “significant” question first, or the status question first.

Thus, if we determine that a portion of the range is not “significant,” we do not need to determine whether the species is in danger of extinction or likely to become so in the foreseeable future. If we determine that the species is not in danger of extinction or likely to become so in the foreseeable future in a portion of its range, we do not need to determine if that portion is “significant.”

Applying the process described above, to identify whether any portions warrant further consideration for Deseret milkvetch, we determine whether there is substantial information indicating that (1) particular portions may be significant and (2) the species may be in danger of extinction in those portions or likely to become so within the foreseeable future. To identify portions that may be significant, we consider whether any natural divisions within the range might be of biological or conservation importance. To identify portions where the species may be in danger of extinction or likely to become so in the foreseeable future, we consider whether the threats are geographically concentrated in any portion of the species’ range.

We evaluated the range of Deseret milkvetch to determine if any area may be a significant portion of the range. Based on the small range of Deseret milkvetch—approximately 345 ac (140 ha) in an area 2.8 mi (4.5 km) by 0.3 mi (0.5 km)—we determined that the species is a single, contiguous population and that no separate areas of the range are significantly different from others or likely to be of greater biological or conservation importance than any other areas due to natural biological reasons alone. Therefore, there is not substantial information that logical, biological divisions exist within the species’ range.

After determining no natural biological divisions are delineating separate portions of the Deseret milkvetch population, we next examined whether any threats are geographically concentrated in some way that would indicate the species could be in danger of extinction, or likely to become so, in that area. There is some difference in livestock grazing between State and private lands, with little or no grazing on the 67 percent of habitat occurring on State lands and occasional potential grazing on the remaining private lands. However, steep topography limits grazing everywhere, and no fences are separating State and private lands (U.S. Fish and Wildlife Service 2011, p. 17). We have reviewed other potential threats and conclude that none of them is concentrated in any portion of the species' range to affect the representation, redundancy, or resiliency of the species.

We did not identify any portions of the species' range that are likely to be both significant and in danger of extinction or likely to become so in the foreseeable future. Therefore, no portion warrant further consideration to determine whether the species is in danger of extinction or likely to become so in the foreseeable future in a significant portion of its range. We conclude that the species is, therefore, not an endangered species or threatened species based on its status in a significant portion of its range.

Determination of Status

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to Deseret milkvetch. After review and analysis of the information regarding stressors as related to the five statutory factors, we find that the ongoing stressors are not of sufficient imminence, intensity, or magnitude to indicate that this species is presently in danger of extinction throughout all

or a significant portion of its range. Additionally, no threats exist currently, nor are any potential stressors expected to rise to the level that would likely cause the species to become in danger of extinction in the foreseeable future, throughout all or a significant portion of the species' range. Because the species is not in danger of extinction now or the foreseeable future throughout all of its range or any significant portion of its range, it does not meet the definition of an endangered species or threatened species. Therefore we find that Deseret milkvetch no longer requires the protection of the Act, and we are removing the species from the List of Endangered and Threatened Plants.

Effects of the Rule

This final rule revises 50 CFR 17.12(h) by removing Deseret milkvetch from the Federal List of Endangered and Threatened Plants. The prohibitions and conservation measures provided by the Act, particularly through sections 7 and 9, no longer apply to this species. Federal agencies will no longer be required to consult with the Service under section 7 of the Act in the event that activities they authorize, fund, or carry out may affect Deseret milkvetch. There is no critical habitat designated for this species; therefore, this rule does not affect 50 CFR 17.96.

Post-delisting Monitoring

Section 4(g)(1) of the Act requires us, in cooperation with the States, to implement a monitoring program for not less than five years for all species that have been delisted due to recovery. The purpose of this requirement is to verify that a species remains secure from risk of extinction after it has been removed from the protection of the Act. The monitoring is designed to detect the failure of any delisted species to sustain itself without the protective measures provided by the Act. If at any time during the

monitoring period, data indicate that protective status under the Act should be reinstated, we can initiate listing procedures, including, if appropriate, emergency listing under section 4(b)(7) of the Act. Section 4(g) of the Act explicitly requires us to cooperate with the States in development and implementation of post-delisting monitoring programs, but we remain responsible for compliance with section 4(g) of the Act and, therefore, must remain actively engaged in all phases of post-delisting monitoring. We also seek active participation of other entities that are expected to assume responsibilities for the species' conservation post-delisting.

We are delisting Deseret milkvetch based on new information we have received as well as recovery actions taken. Since delisting will be due in part to recovery, we have prepared the post-delisting monitoring (PDM) plan for Deseret milkvetch. The PDM plan was prepared in coordination with the Utah Department of Natural Resources (UDNR) and UDWR. Monitoring will be a joint effort between UDNR and the Service. The PDM plan discusses the current status of the species and describes the methods proposed for monitoring if the species is removed from the Federal List of Endangered and Threatened Plants. Monitoring will occur annually for at least five years, beginning in 2019. At the end of 5 years, the species' population status will be evaluated, with three possible outcomes: (1) If the population is stable or increasing with no new or increasing stressors, PDM will conclude; (2) if the population is decreasing, but may be correlated with precipitation levels and remains above 20,000 plants on the WMA, PDM will be extended for an additional 3 to 5 years and then the population status will be reevaluated; or (3) if the population is decreasing without correlation to precipitation levels, and fewer than 20,000 plants exist on the WMA, a formal status review will be initiated.

A final PDM plan is available (see ADDRESSES). We will work closely with our partners to maintain the recovered status of Deseret milkvetch and ensure post-delisting monitoring is conducted and future management strategies are implemented (as necessary) to benefit Deseret milkvetch.

Required Determinations

National Environmental Policy Act

We have determined that we do not need to prepare an environmental assessment or environmental impact statement, as defined under the authority of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), in connection with regulations pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the *Federal Register* on October 25, 1983 (48 FR 49244).

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994, Government-to-Government Relations with Native American Tribal Governments (59 FR 22951), E.O. 13175, and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes. We have

determined that no Tribes will be affected by this rule because no tribal lands are within or adjacent to Deseret milkvetch habitat.

References Cited

A complete list of all references cited in this final rule is available at <http://www.regulations.gov> under Docket No. FWS–R6–ES–2016–0013, or upon request from the Utah Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this final rule are staff members of the Service’s Mountain-Prairie Region and the Utah Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

1. The authority citation for part 17 continues to read as follows:

AUTHORITY: 16 U.S.C. 1361-1407; 1531-1544; and 4201-4245, unless otherwise noted.

§ 17.12 [Amended]

2. Amend § 17.12(h) by removing the entry for “*Astragalus desereticus*” under FLOWERING PLANTS from the List of Endangered and Threatened Plants.

Dated: August 22, 2018.

James W. Kurth

Deputy Director, U.S. Fish and Wildlife Service,

Exercising the Authority of the Director,

U.S. Fish and Wildlife Service.

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